REMARKS

Claims 1-5 are pending in the current application. Claims 1, 3 and 5 are independent claims.

35 U.S.C. § 112, First Paragraph

Claim 5 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses this enablement rejection.

The Examiner alleges support cannot be found for "generating an SINR estimate based on the quasi-pilot symbol samples," as recited in claim 5. As presented in the Request for Pre-Appeal Brief Conference filed on March 27, 2006, originally filed claim 5 recites the exact features as current pending claim 5. *In re Koller*, provides that original claims constitute their own description. Accordingly, "later added claims of similar scope and wording are described thereby." *613 F.2d 819, 204 USPQ 702 (CCPA 1980).*

In response to Applicants' arguments presented in the Pre-Appeal Brief Conference, the Examiner opines

> On pg. 5, applicant does not disclose "generating an SINR estimate based on the quasi-pilot symbol samples". Examiner asserts that Pg. 5, 16-17, applicant actually recites "The SINR estimator 12 **can** employ any well-known SINR estimator that generates an SINR estimate based on pilot symbols." Nowhere in this recitation is the mentioned of quasi-pilot symbol samples. This procedure is not well known in the art and is not explicitly stated with applicant's disclosure. Examiner asserts that applicant must explicitly disclose the process of generating an SINR estimate based on the quasi-pilot symbol samples. Therefore the rejection to claim 5 stands.
> (See Page 3 of the May 19, 2006 Office Action).

With all due respect, it appears that the Examiner has failed to fully appreciate. Applicants' arguments, and the Examiner misunderstands the principles of the enablement requirement.

In the Pre-Appeal Brief Conference, Applicants stated that the specification on page 5, lines 4-23, discloses a method of "converting [] data symbols into quasi-pilot symbols,"

which contradicts the Examiner's belief that the present application fails to disclose "quasi-pilot symbols samples."

Second, the Examiner quotes page 5, lines 16-17, whereas, Applicants cited page 5, **lines 15-16**. As can be seen from FIG. 2 and the disclosure on page 5, a demodulator and estimator 6 receives data samples. The multiplier 8 multiplies the data symbol sample by the estimated polarity; thus creating quasi-pilot symbol samples. Page 5, lines 15-16 discloses that an SINR estimator 12 estimates the SINR using the output (quasi-pilot symbol samples) of the multiplier 8. If page 5, lines 4-6 specifically discloses that data symbols are converted into quasi-pilot symbols, is it not logical the specification discloses that the SINR estimator estimates the SINR using the quasi-pilot symbol samples?

Accordingly, for all the reasons given above, Applicants submit that claim 5 is enabled.

35 U.S.C. § 103

Claims 1-4 stand rejected under 35 USC 103(a) as being unpatentable over Fukuhara (USP 4,627,103) in view of Stansell, Jr. et al. (USP 6,160,841). Applicant respectfully traverses this rejection.

Without acquiescing to the Examiner's other rejection reasons, the Examiner alleges that Fukuhara et al. teaches all the features of claim 1, except Fukuhara et al. fails to teach that SINR estimate is not dependent only on polarities of the plurality of received data symbol samples. However, the Examiner alleges Stansell, Jr. et al. cures the deficiency of Fukuhara et al.

Claim 1 recites, *inter alia*, generating an SINR estimate. On the other hand, Stansell, Jr. et al. and more specifically column 33, line 35 to column 36, line 6, (cited by the Examiner as alleging teaching SINR estimate is not dependent only on polarities of the plurality of received data symbol samples) teach a pseudorandom noise (PNR) code receiver.

PNR codes are used to modulate satellite signals, wherein the PNR codes are unique to the satellite. The modulated signals are used by a receiver to identify the individual satellite. Column 1, lines 22-36. Stansell, Jr. et al. teaches correlating input sample signals with reference I and Q signals with a multipath mitigation window (MMW) to generate I_{MMW} and Q_{MMW}. The I_{MMW} and Q_{MMW} are multiplied with I and Q reference signals to produce I_Φ and Q_Φ. The I_Φ and Q_Φ may be further multiplied and filtered to "achieve desired signal-to-noise ratio." (Emphasis added.) Column 37, lines 1-6. In Stansell, Jr. et al., the SNR of the I_Φ and Q_Φ is a manipulated result. Achieving a desired signal-to-noise ratio is not an estimation of an SINR estimate. Accordingly, a reference that teaches achieving a desired SNR ratio cannot teach an SINR estimate is not dependent only on polarities of the plurality of received data symbol samples. Accordingly, even if the teaching of Fukuhara is combined with the teaching of Stansell, Jr. et al., the combination would still fail to teach all the limitations recited in independent claims 1, 3 and 5

For at least the reasons given above, Applicants submit that claims 1, 3, and 5 are patentable over the Examiner's cited references. Dependent claims 2 and 4 are also patentable for respectively depending on an allowable base claim.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By _____

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